UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, WA 98101

October 9, 2007

Reply to
Attn Of: ETPA-088

EPA Ref: 03-078-FRC
FERC Project No. 1971-079

Magalie R. Salas, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Dear Ms. Salas:

The U.S. Environmental Protection Agency (EPA) has reviewed the final Environmental Impact Statement (EIS) for the proposed relicensing of the **Hells Canyon Hydroelectric Project** (CEQ No. 20070376) located on the Snake River, in Washington and Adams Counties, in Idaho, and Wallowa and Baker Counties, in Oregon. The project is licensed to Idaho Power Company. This review has been conducted in accordance with our authorities and responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The EIS evaluates the environmental impacts of relicensing the existing three components (dams, reservoirs, and powerhouses) that comprise the Hells Canyon Project, specifically the Brownlee, Oxbow and Hells Canyon dams, which provide 1,167 megawatts of power. The EIS assesses the environmental and economic effects of: continuing to operate the project with no changes or enhancements (no-action alternative); operating the project as proposed by Idaho Power (Idaho Power's proposal); operating the project as proposed by Idaho Power with additional or modified environmental measures ("staff alternative").

Our November 3, 2006, comments on the draft EIS focused on the temperature control structure, the Temperature Adaptive Management Plan and the project's impacts on downstream waters. As detailed in the comments provided below, we do not believe that the final EIS has adequately addressed our comments.

While we note that the final EIS contains valuable additional information and discussions, we find that it lacks sufficient information to demonstrate that water quality standards will be met. The EIS acknowledges the project's impacts on the temperature regime of the Snake River, and its adverse effects on salmon. We concur with FERC's findings that the project likely causes reduced survival of fall Chinook salmon eggs that are spawned in the early part of the spawning season and that high temperatures prior to spawning may lead to higher levels of pre-spawning mortality and reduced egg mortality. In addition, we appreciate the discussion in the EIS regarding measures that may be implemented to address exceedances of water quality standards (e.g., bubble upwelling and watershed mitigation measures). However,

the EIS needs additional information regarding the temperature control structure, the proposed Temperature Adaptive Management Plan, and the facilities impacts on downstream waters.

Temperature Control Structure (TCS)

The EIS concludes that a temperature control structure could reduce the adverse effect to salmon, meet the Hells Canyon Complex's load allocation expressed in the Snake River Temperature TMDL, and attain the 13°C spawning criteria. However, the EIS concludes a TCS is not warranted due to high costs, it would result in harmful increased temperatures in the summer, and it would degrade water quality downstream due to pollutants in the deep waters of the reservoir. The information provided in the EIS is insufficient to support these conclusions.

The information provided in the EIS regarding the costs of a TCS does not include adequate information to determine if the costs presented accurately portray the costs associated with the construction and installation of a TCS at the Hell's Canyon Project. Without the additional information outlined in our comments on the draft EIS, there remains a great deal of uncertainty regarding the cost of a TCS. For instance, TCS facilities have been installed at other dams in the region at far less cost than that cited by IPC. At a minimum, the document should include a discussion of other projects where TCS facilities have been installed and the associated installation and operation costs.

The EIS concludes that a TCS would cause increased temperature in the summer. This conclusion is based on previous modeling conducted by IPC for FERC, but is not consistent with modeling IPC conducted for the Oregon Department of Environmental Quality (ODEQ), that demonstrates that it is feasible to operate a TCS to significantly reduce fall temperatures without increasing temperatures in the summer. EPA requested additional modeling in our comments on the draft EIS to further investigate the feasibility of a TCS for the Hell's Canyon project. Based on FERC's recommendation, we attempted to work directly with IPC to complete the additional modeling scenarios as outlined in our July 25, 2007, letter to Mr. Chris Randolph of IPC. Unfortunately, IPC later declined to perform the additional modeling (July 6, 2007 and August 2, 2007, letters from Richard M. Glick). We continue to believe that the modeling scenarios we requested would further demonstrate the benefits of a TCS at the Hell's Canyon Hydroelectric facility.

We agree that water drawn from lower reservoir depths for a TCS may be of lower water quality than that of the receiving waters. However, the EIS does not provide any quantitative information on the downstream impacts of the water quality parameters mentioned as a concern from installing a TCS (i.e., dissolved oxygen, ammonia, mercury, and organochlorine compounds). Further, the EIS does not provide information on potential measures to mitigate for the degradation associated with these parameters, such as forced oxygen to increase dissolved oxygen levels. Additionally, efforts currently underway to improve reservoir water quality are not addressed (e.g., Hells Canyon nutrient TMDL) in the final EIS.

In summary, there is information showing that operation of a TCS could attain water quality standards. The final EIS does not have sufficient information regarding cost or adverse water quality impacts to support the decision not to use such structures, which in turn affects the ability to show compliance with the Clean Water Act.

Temperature Adaptive Management Plan

The EIS states that temperature water quality standard exceedances will be addressed through the Clean Water Act (CWA) Section 401 water quality certification process which will include a Temperature Adaptive Management Plan (Plan). Discussions with Idaho Department of Environmental Quality (IDEQ) and ODEQ indicate that additional information is needed to proceed with the CWA Section 401 certification for the Hell's Canyon Hydroelectric Project. Additionally, in a letter dated August 17, 2007, the Washington Department of Ecology (WDOE) expressed its concerns with the impacts the project will have on water quality downstream in the Snake River, and WDOE requested EPA involvement in the CWA Section 401 certification process. The EIS is a public disclosure document and needs to include all information pertinent to making decisions regarding the proposed action. While the EIS contains some information regarding the project's impacts on water quality and meeting water quality standards, it references the reader to the CWA Section 401 certification applications for information on how water quality standards will be met. This information should be included in the EIS not in supporting documentation.

Our comments on the draft EIS requested additional information on the status of the outstanding temperature issues in CWA Section 401 certification process. The information provided in the final EIS does not provide sufficient information on the CWA Section 401 certification process and the outstanding issues surrounding water temperatures. In addition, the information provided regarding the Plan does not indicate that temperature water quality standards and TMDL targets will be met, nor does it indicate that any mitigation measures evaluated under the Plan will actually be implemented. As it stands, the final EIS does not contain sufficient information to demonstrate that water quality standards will be attained with the implementation of the Plan.

Impacts to Downstream Waters

The EIS discussion of measures, such as the bubble upwelling system and upstream watershed improvements, to attain water quality standards is limited to the 13°C spawning criteria that applies on October 23. However, there are two other water quality standards of significance that are not addressed. First, is Oregon's "natural season thermal pattern" (NSTP) criteria that applies to the Snake River downstream of the Hells Canyon dam. EPA's analysis indicates that the fall thermal shift caused by the Hell Canyon project results in these standards being exceeded by approximately 3°C from early September until late October. The second standard omitted from the EIS analysis is Washington's criterion that no temperature increases, at any time, exceed 0.3°C due to any single source or 1.1°C from all sources combined. This criterion applies at the Washington border downstream of Hells Canyon dam. EPA's current information indicates that the project impact in the fall exceeds this standard. We will continue to work with ODEQ, IDEQ and WDOE to assure that water quality standards are met by the Hell's Canyon Hydroelectric project.

We are interested in working with you to assure that our concerns are addressed and the Record of Decision for the project adequately addresses water quality impacts. While EPA is open to considering all options to improve temperature conditions, such as upstream watershed measures, EPA believes that a TCS is the only measure analyzed to date that can address the water quality standards issues related to the Hell's Canyon Hydroelectric facilities. Accordingly,

because of the importance of fish habitat below the project and water quality standard attainment, we believe a TCS warrants further analysis and consideration as a license condition for the Hells Canyon project.

Thank you for the opportunity to review and comment on the draft EIS. If you have any questions regarding EPA's comments, please contact John Palmer, Region 10 Office of Water and Watersheds, at (206) 553-6521, or Christine Reichgott, Manager, NEPA Review Unit at (206) 553-1601.

Sincerely,

/s/
Michelle Pirzadeh, Director
Office of Ecosystems, Tribal and Public Affairs

cc: IDEQ
ODEQ
WDOE
NOAA